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10/550,493	09/26/2005	Michael Bauer	BAUE3002/JEK	4664
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/550,493

Applicant(s)

BAUER ET AL.

Examiner

Michael Andler

Art Unit

2876

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 February 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 6-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 September 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. The examiner acknowledges and has entered the amendments/arguments filed on 5 February 2009.

Specification

2. The objection to the specification is withdrawn in light of the amendment filed on 5 February 2009.

Claim Objections

3. The objection to claim 3 is withdrawn in light of the amendment filed on 5 February 2009.

Claim Rejections - 35 USC § 112

4. The rejection of claims **1, 9 and 11** under the second paragraph of 35 U.S.C. 112 is withdrawn in light of the amendment filed on 5 February 2009.3

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

- a) Claims **1-3, 9, 11, 13-14, and 16-18** are rejected under 35 U.S.C. 103(a) as being unpatentable over Royer (US 7,168,623) in view of Moskowitz et al. (US 5,528,222) and further in view of Trapletti (WO 93/22146).

Regarding claims **1, 9, 11, and 17-18**, Royer discloses a self-adhesive security label for a data carrier exemplified by a security document or a document of value, comprising

a substrate (Fig 6, item 14: base) on the front side of which are applied security features (See Fig 11, item 38: *logo or a code* where a code is understood to be a type of security feature) and on the back side of which is provided a cold adhesive foil (See Fig 6, item 20: *double faced adhesive*, Col 1, line 35: "*labels which area easy to lay...by hand*" and Fig 11, item 36: *a packaging strip* comprising *labels 10* where a foil is defined as a layer and a cold adhesive is one typically found on a label that, when used, is pressed into place),

wherein the security label includes an integrated circuit (Fig 6, item 12: *chip*) disposed in a recess of the adhesive foil (Fig 6, item 21: slot) adapted to store security data (See Col. 1, lines 22-25: "*large amount of immediately rewritable information can be stored therein*" where it is well known in the art that information related to the *code 38* (security data) would be stored in the *chip 12*) and

an antenna (Fig 6, item 16: *antenna*) disposed between the substrate and the adhesive foil (See Fig 5 and Col 4, lines 10-12: "*A series of antennas...formed on a...indexed strip intended to be cut into a series of bases*" and lines 20-21: "*double-faced adhesive 20...is...glued on the indexed strip*" and Col 2, lines 56-58: "*Antenna 16 may be formed on the base*)

said antenna connected with the integrated circuit (See Fig 6, item 26: *welding beads* where it is well known in the art that welding beads would be melted by ultrasonic

radiation to form an electrical connection without damaging the *chip 12*) so as to provide a contactless communication with the integrated circuit (See Col 1, lines 23-25: "*a large amount of immediately rewritable information can be stored therein, without having to handle the object*" thus providing contactless communication to the chip through the antenna, since there would have to be contact between the integrated circuit and the antenna in order for there to be an electrical connection, which therefore could not be "contactless")

Royer also suggests that the invention relates "to self-adhesive labels" but also that "the present invention may also apply to any self-adhesive electronic circuit" (Col 4, lines 57-59) and that "the surface of the base which is not glued to the double-faced adhesive may be painted or printed or covered with an easily paintable or printable material" (Col 4, lines 54-57).

Royer does not specifically teach a data carrier carrying a security label wherein the front-side security features contain a printed area produced by an intaglio printing method.

Moskowitz et al. discloses a data carrier carrying a security label (See Fig 11: CD, Fig 8: *envelope*, Fig 9: *passport*, Fig 10: *admission ticket*, Fig 12: *credit card*, and Fig 13: *drivers license* and Fig 8, item 810: *thin RF tag*) .

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention, to use a self-adhesive label containing an integrated circuit on a data carrier, in order to provide "*a flexible radio frequency tag apparatus that may fit within the thickness limit of...a postage stamp*" (Col 3, lines 3-5).

Moskowitz et al. also suggests where the "top surface...can be printed with the appropriate graphics while the bottom surface has a pressure sensitive adhesive" (Col 6, lines 47-49).

Trapletti suggests "an improved method of providing a security feature to documents via intaglio printing" (Page 1, lines 2-4) and that "methods for accurately printing very fine lines and other elements, such as intaglio printing" are "well known in the prior art" (Page 2, lines 5-7). Trapletti also suggests that the invention can be used "independent of or in combination with other security techniques" (Page 3, lines 23-24).

Royer as modified by Moskowitz et al. does not specifically teach wherein the front-side security features contain a printed area produced by a sheet-fed intaglio printing method.

Trapletti discloses wherein the front-side security features contain a printed area produced by a sheet-fed (See Fig 2 where the paper is fed by sheet and it is well known in the art to perform the printing at various stages as a matter of design choice) intaglio printing method (See Fig 4, and page 3, lines 10, 22 and 25 *"there are many uses for this invention...such as...labeling documents...and security labels"*).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use an improved method of intaglio printing on a label for documents of value "in order to produce an original document that cannot be readily reproduced by methods, such as photocopying or facsimile reproduction" (Trapletti, page 3, lines 12-14) and for adding "an embossed or raised effect...without the creation of stress on the substance" (Page 3, lines 33-34).

Regarding claims **2 and 14**, Royer discloses wherein the recess with the integrated circuit is closed with a self-adhesive covering element (See Fig 6, item 23 and Fig 9, item 22: *resin drop* and Col 3, lines 26-27: "*which can be chosen to be very fluid*" and Col 4, line 23: "*after which slot 21 is filled with drops of resin*" where it is well known in the art that a resin for this type of use is also called a self-adhesive resin).

Regarding claims **3 and 13**, Royer discloses wherein the antenna is printed on, bonded to or embossed into the substrate (Col 2, lines 56-58: "*Antenna 16 may be formed on the base in a known manner by metal deposition followed by an etching*" where metal deposition is a known method of bonding metals to substrates).

Regarding claim **16**, Royer discloses wherein the steps c) and d) are effected in a reel-fed manner (See Fig 10, item 28: *indexed strip* and item 20: *cut-up double-faced adhesive* and Col 4, lines 10-11: "a series of antennas...has been formed on a mechanically indexed strip 28 intended for being cut into a series of bases" where the antenna and adhesive are clearly assembled in a reel-fed manner).

b) Claim **4** is rejected under 35 U.S.C. 103(a) as being unpatentable over Royer (US 7,168,623), as modified by Moskowitz et al. (US 5,528,222) and Trapletti (WO 93/22146) as applied to claim **1**, and further in view of admissions of prior art by Bauer et al. in the specification.

Regarding claim **4**, Royer as modified by Moskowitz et al. and Trapletti, discloses all the limitations of claim **1**.

Trapletti suggests "an improved method of providing a security feature to documents via intaglio printing" (Page 1, lines 2-4) and that "methods for accurately printing very fine lines and other elements, such as intaglio printing" are "well known in the prior art" (Page 2, lines 5-7). Trapletti also suggests that the invention can be used "independent of or in combination with other security techniques" (Page 3, lines 23-24).

Bauer et al. suggests that "such security features basically are known and therefore are not explained in detail" (Section 0015, lines 4-5).

Royer as modified by Moskowitz et al. and Trapletti does not specifically teach wherein the front-side security features are selected from the group consisting of a passport photograph, a finely structured pattern, machine readable features, fluorescent substances, magnetic or electrically conductive substances, and a polydimensional bar code.

Bauer et al. discloses wherein the front-side security features are selected from the group consisting of a passport photograph, a finely structured pattern, machine readable features, fluorescent substances, magnetic or electrically conductive substances, and a polydimensional bar code (Section 0015, lines 1-4).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to include these types of security features on a security label, "in order to produce an original document that cannot be readily reproduced by methods, such as photocopying or facsimile reproduction" (Trapletti, page 3, lines 12-14).

c) Claims **6 and 7** are rejected under 35 U.S.C. 103(a) as being unpatentable over Royer (US 7,168,623) as modified by Moskowitz et al. (US 5,528,222) and Trapletti (WO 93/22146) as applied to claim **1**, and further in view of Staub et al (US 5,886,798).

Regarding claims **6 and 7**, Royer as modified by Moskowitz et al. and Trapletti discloses all the limitation of claim **1**.

Royer also suggests that the invention relates "to self-adhesive labels" but also that "the present invention may also apply to any self-adhesive electronic circuit" (Col 4, lines 57-59) and that "the surface of the base which is not glued to the double-faced adhesive may be painted or printed or covered with an easily paintable or printable material" (Col 4, lines 54-57).

Moskowitz et al. suggests a "flexible radio frequency tag apparatus with a thin flexible protective lamination" and that the "top surface...can be printed with the appropriate graphics while the bottom surface has a pressure sensitive adhesive" (Col 6, lines 47-49).

Trapletti suggests "an improved method of providing a security feature to documents via intaglio printing" (Page 1, lines 2-4) and that "methods for accurately printing very fine lines and other elements, such as intaglio printing" are "well known in the prior art" (Page 2, lines 5-7). Trapletti also suggests that the invention can be used "independent of or in combination with other security techniques" (Page 3, lines 23-24).

Royer as modified by Moskowitz et al. and Trapletti does not specifically teach wherein the front-side security features at least partially are covered with a foil, wherein the foil has a thickness of less than 20 micron, and wherein the foil contains holographic

diffraction structures.

Staub et al. discloses wherein the front-side security features at least partially are covered with a foil (See Fig 1, items 5 and 7: *lacquer layers*), wherein the foil has a thickness of less than 20 micron (See Col 4, lines 27-32: "*the relief of the diffraction structures 9 has a typical profile height which is in the range of about .1 to 1.5 micrometre...(and) an application of the second lacquer layer 7 of about 0.15 to 1.5 micrometre in thickness*" where it is understood that the *lacquer layer 5* would be of roughly the same dimensions in order to be "*approximately transparent over large parts of the visible range of the electromagnetic spectrum*" (Col 12, lines 18-20) , and wherein the foil contains holographic diffraction structures (Fig 1, item 9: *diffraction structures*).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to include diffraction structures embedded in a lacquer layer to cover a security element in order to provide an "apparatus for manual and/or machine verification of the authenticity of such an information carrier" (Col 2, lines 29-31) that is "preferably suitable for use as security elements for documents of all kinds" (Col 1, lines 16-17).

d) Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Royer (US 7,168,623) as modified by Moskowitz et al. (US 5,528,222) and Trapletti (WO 93/22146) as applied to claim 1, and further in view of Krul et al (US 6,830,192).

Regarding claim 8, Royer as modified by Moskowitz et al. and Trapletti disclose all the limitations of claim 1. Royer suggests that "base 14 is made of a flexible material

of low thickness, for example a piece of a polyester sheet." (Col. 2, lines 59-61). Royer also suggests that "the surface of the base which does not receive the double-faced adhesive is provided to receive the printing of a pattern, of a text or of a code" (Col 1, lines 61-64) and shows a *logo 38* printed on a *label 10* in Figure 11.

Royer does not specifically teach wherein the substrate comprises cotton paper or paper with a mixture of cotton/synthetic fiber.

Krul et al. discloses wherein the substrate comprises cotton paper or paper with a mixture of cotton/synthetic fiber (See Col 1, lines 37-41 and Col 2, lines 4-8: "a paper-based substrate for use in security documents, banknotes and the like, in which an integrated circuit is incorporated" where "paper is understood to mean paper which is made from natural or synthetic fibres, as well as "paper" which can nowadays be produced from plastic films, which paper is used for the production of security paper, banknotes, and the like").

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to utilize any one of many types of paper products available as a substrate for a self-adhesive security label as suggested by both prior art references, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design variation. In re Leshin, 125 USPQ 416.

e) Claim **10** is rejected as being unpatentable over Royer (US 7,168,623) as modified by Moskowitz et al. (US 5,528,222) and Trapletti (WO 93/22146) as applied to claim **9**, and further in view of Rancien (US 2004/0157054).

Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

Regarding claim **10**, Royer as modified by Moskowitz et al. and Trapletti, disclose all the limitations of claim **9**.

Royer suggests that the invention relates "to self-adhesive labels" but also that "the present invention may also apply to any self-adhesive electronic circuit" (Col 4, lines 57-59) and that "the surface of the base which is not glued to the double-faced adhesive may be painted or printed or covered with an easily paintable or printable material" (Col 4, lines 54-57).

Rancien suggests that "the present invention relates to...a sticky security document such as a visa for sticking to a passport" (Section 0001, lines 2-3).

Royer as modified by Moskowitz et al. and Trapletti do not specifically teach wherein the adhesive strengths of the cold adhesive foil and of the bond between the integrated circuit and the antenna are adjusted relative to each other such that a removal of the security label from the data carrier results in damaging the antenna or separating the antenna from the integrated circuit.

Rancien discloses wherein the adhesive strengths of the cold adhesive foil and of the bond between the integrated circuit and the antenna are adjusted relative to each

other such that a removal of the security label from the data carrier results in damaging the antenna or separating the antenna from the integrated circuit (See section 0017, lines 1-2 and section 0018: "In different zones, the adhesive layer may present different adhesive properties with regard to the antenna...thus, when attempting to unstuck the document, the antenna may remain secured to the covering layer in the first zone and remain secured to the backing in the second zone").

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to adjust the adhesive layer of a security label in order to damage the antenna when removing the label, in order to "improve the security of sticky documents provided with radiofrequency identification devices" (Section 0005, lines 2-3).

f) Claim **12** is rejected as being unpatentable over Royer (US 7,168,623) as modified by Moskowitz et al. (US 5,528,222) and Trapletti (WO 93/22146) as applied to claim **11**, and further in view of Isen et al (US 5,763,058).

Regarding claim **12**, Royer as modified by Moskowitz et al. and Trapletti, disclose all the limitations of claim **11**.

Royer suggests that "antenna 16 may be formed on the base in a known manner by metal deposition followed by an etching" (Col 2, lines 56-58).

Royer does not specifically teach applying the antenna arrangement by screen printing conductive inks.

Isen et al. discloses applying the antenna arrangement by screen printing conductive inks (See Fig 10 and Col 3, lines 3-4: "*an electrical circuit component formed of a conductive liquid printed directly onto one side of the flexible substrate*"). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to apply an antenna to a substrate of a security label using conductive liquids, in order to provide a label capable of performing it's function, "as printed, without the need for post-printing processes such as metal etching...and/or electroless deposition" (Col 2, lines 65-67).

g) Claim 15 is rejected as being unpatentable over Royer (US 7,168,623) as modified by Moskowitz et al. (US 5,528,222) and Trapletti (WO 93/22146) as applied to claim 11, and further in view of Robertz et al (US 6,206,292).

Regarding claim 15, Royer as modified by Moskowitz et al. and Trapletti, disclose all the limitations of claim 11.

Royer also suggests that the invention relates "to self-adhesive labels" but also that "the present invention may also apply to any self-adhesive electronic circuit" (Col 4, lines 57-59) and that "the surface of the base which is not glued to the double-faced adhesive may be painted or printed or covered with an easily paintable or printable material" (Col 4, lines 54-57). Royer also discloses assembling the *antenna 16* and *chip 12* to the *base 14* in a continuous reel-fed manner (See Fig 10).

Robertz et al. suggests an invention "directed to directly printable and or/writable RFID transponders which can be used as labels...identification cards and access authorization cards (Col 1, lines 6-9).

Royer does not specifically teach wherein step b) is carried out by providing a reel-fed substrate with a background print by offset printing method.

Robertz et al. discloses wherein the printing is carried out by providing a reel-fed substrate (Col 5, lines 42-43: "*The printable layer on the opposite side of the carrier film can likewise be formed continuously*") with a background print by offset printing method (Col 3, lines 65-66: "The printable layer can also be printed by means of...offset...printing techniques").

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention, to print patterns, text or codes on a label using offset printing "in order to form, on the surface, optically readable information corresponding to the desired end use as a label, tag, access authorization card or identification card (Robertz et al, Col 4, lines 4-6).

Response to Arguments

6. Regarding claims **1 and 13** and their respective dependent claims, applicant has amended claim **1** to clarify that the printed area "extends over the recess in which the integrated circuit is disposed" and has argued that the cited prior art references do not teach this limitation. The examiner would respectfully point out Royer teaches this additional limitation as disclosed in Fig 11, item 38 which shows labels, "the second surface of which has been covered with a logo or a code" (Col 4, lines 45-47) and as

further shown in Fig 6, item 14 where the base 14 that receives the printing clearly extends over the recess.

Further regarding claim **13**, applicant has amended to clarify that the integrated circuit is incorporated and connected "after applying the security features" and to add "a printed area...provided on the substrate by an intaglio printing method". The examiner would respectfully point out that these limitations were previously addressed in the prior office action with regards to claims **1 and 13** and have been repeated in the present action.

The examiner would also point out that the applicant does not appear to have directly traversed the examiner's assertion that "it is well known in the art to perform the printing at various stages" in the manufacturing process of an RFID label (See Office Action dated 5 November 2008, page 6 and MPEP 2144.03), although applicant appears to indirectly traverse the assertion by arguing that "intaglio printing imparts both visual and structural changes to a substrate" which allegedly is not compatible with the teachings of Royer. Applicant's arguments are not persuasive and the examiner would direct applicant to the teachings of Palmer et al. (US 6,019,865, Fig 6), Fox et al. (US 6,280,544, Fig 2) and Hohberger et al. (US 6,857,714, Fig 3) all of which disclose printing on a substrate using combinations of heat and/or pressure prior to attaching a transponder and which support the examiner's assertion that it is well known in the art to print on a substrate of a label prior to or after attaching a transponder to an RFID label.

As pointed out by the applicant, "security elements often are formed as self-adhesive labels, which are pasted to the security document or document of value by an authorized authority, for example a passport authority" and that these security elements have "printed areas produced by intaglio printing" (See Specification, sections 0003-0004). In particular, Royer et al. discloses that the adhesive rectangles can be precut "to be glued to the bases... (and) manufactured according to the embodiments of Figs. 1 and 2...by a machine or by an operator" (Col 4, lines 28-36). Therefore, to summarize the rejection in general, the examiner takes the stance that it would require only ordinary skill in the art to use the invention of Royer with any known printed substrate capable of being used as a label.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Andler whose telephone number is (571) 270-5385. The examiner can normally be reached on Monday-Friday 7:30 AM to 3:30 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Lee can be reached on (571) 272-2398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael Andler/
Examiner, Art Unit 2876

/Michael G Lee/
Supervisory Patent Examiner, Art Unit 2876